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### NOTICE OF ALLOWANCE AND FEE(S) DUE

4743 7590 1229/2909 MARSHALL, GERSTEIN & BORUN LLP 233 SOUTH WACKER DRIVE 6300 SEARS TOWER

CHICAGO, IL 60606-6357

MCGUTHRY BANKS, TIMA MICHELE			
ART UNIT	PAPER NUMBER		
1793			

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,496	06/23/2005	Myoung-Kyun Shin	29347/50798	4171

TITLE OF INVENTION: APPARATUS FOR MANUFACTURING MOLTEN IRONS TO IMPROVE OPERATION OF FLUIDIZED BED TYPE REDUCTION APPARATUS AND MANUFACTURING METHOD USING THE SAME

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/29/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address and indicated unless corrected below of directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or indicated unless corrected below of directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or indicated unless corrected below of directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or indicated unless corrected below of directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or indicated unless corrected below of directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or indicated unless corrected below of directed otherwise in Block 1, by (a) specifying a new correspondence address; and or indicated unless corrected below of directed otherwise in Block 1, by (a) specifying a new correspondence address; and or indicated unless correspondence address and or indicated unles

#### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450

Alexandria, Virginia 22313-1450 or Fax (571)-273-2885

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 4743 7590 12/29/2009 Certificate of Mailing or Transmission MARSHALL, GERSTEIN & BORUN LLP I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sulficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEB address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below. 233 SOUTH WACKER DRIVE 6300 SEARS TOWER CHICAGO, IL 60606-6357 (Depositor's name (Signature APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/540.496 06/23/2005 29347/50798 4171 Myoung-Kyun Shin TITLE OF INVENTION: APPARATUS FOR MANUFACTURING MOLTEN IRONS TO IMPROVE OPERATION OF FLUIDIZED BED TYPE REDUCTION APPARATUS AND MANUFACTURING METHOD USING THE SAME APPLN, TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE

nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/29/2010
EXAM	INER	ART UNIT	CLASS-SUBCLASS			
MCGUTHRY BANK	S, TIMA MICHELE	1793	075-446000			
L Change of correspondence address or indication of "Fee Address" (37 CFR 1863)  Change of correspondence address (or Change of Correspondence Address from 1970-881/2) attached.  The Address from 1970-881/2 attached or "Fee Address" indication form FTOS-884/7; so of 20.2 or more recent) attached. Use of a Customer Number is required.		2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively. (2) the name of a single firm (having as a member a registered natency or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printice.		era 2	I	
Number is required.   listed, no name will be printed.   ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)						

PLEASE NOTE: Unless an assignce is identified below, no assignce data will appear on the patent. If an assignce is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): 🔲 Individual 🚨 Corporation or other private group entity 🚨 Government 4a. The following fee(s) are submitted: 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) ☐ Issue Fee A check is enclosed. ☐ Publication Fee (No small entity discount permitted) Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit an overpayment, to Deposit Account Number (enclose an extra copy of this fo Advance Order - # of Copies (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

Typed or printed name

maintenance fee notifications

□ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2). a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_ Date

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentially is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 manates to complete, including gathering, preparing, and within 50 cm and/or suggestion. For excluding gathering, preparing, and within 50 cm and/or suggestion. For excluding this burden, should be sent to the chief Information Officer, U.S. Posture and Trademark Office. U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 2231-450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 2231-450.

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## UNITED STATES PATENT AND TRADEMARK OFFICE

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DATE MAILED: 12/29/2009

APPLICATION NO.	FILI	NG DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/540,496	06/23/2005		Myoung-Kyun Shin	29347/50798	4171	
4743	7590	12/29/2009		EXAMINER		
MARSHALL, GERSTEIN & BORUN LLP			MCGUTHRY BANKS, TIMA MICHELE			
233 SOUTH WACKER DRIVE				ART UNIT	PAPER NUMBER	
6300 SEARS TO CHICAGO, IL 6				1793		

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 355 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 355 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## Application No. Applicant(s) 10/540 496 SHIN ET AL. Notice of Allowability Examiner Art Unit TIMA M MCGUTHRY-BANKS 1702 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to the amendment filed 12/14/09. 2. The allowed claim(s) is/are 1-5. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some\* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. \( \overline{\text{Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). T Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. T Examiner's Statement of Reasons for Allowance of Biological Material Other . TMM /George Wyszomierski/

Primary Examiner Art Unit 1793